

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ

RARITAN RIVER BASIN

LOCATION.--Lat 40°17'46", long 74°23'52" referenced to North American Datum of 1983, Monroe Township, Middlesex County, NJ, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi north of Manalapan, 3.1 mi southwest of Matchaponix, 3.3 mi downstream from Still House Brook, and 4.1 mi northeast of Applegarth.

DRAINAGE AREA.--20.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Miscellaneous measurements, water years 1969, 1971, 1979-80, 1986 to current year.

GAGE.--Staff gage.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Date	Discharge, in ft³/s
Nov 8, 2007	11.1
Mar 5, 2008	68.2
May 13, 2008	52.8
Aug 18, 2008	6.79

01405340 MANALAPAN BROOK AT FEDERAL ROAD, NEAR MANALAPAN, NJ—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Cooperative Network Site Descriptor: Mixed Land Use Indicator, NJ Department of Environmental Protection Watershed Management Area 9.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, and suspended residue were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory. Analysis of the split and concurrent replicate samples was performed by the Laboratory Branch of the U.S. EPA, Region II, Division of Environmental Science and Assessment.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Instantaneous discharge, ft ³ /s (00061)	Turbidity white light, det ang 90+/-30 corrctd NTRU (63676)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)
Nov 08...	0940	Surface water, regular	11	6.9	.070	.056	764	11.3	92
Mar 05...	0850	Surface water, replicate	68	93	.093	.074	744	10.1	93
05...	0850	QC - Surface water, split replicate	--	--	--	--	--	--	--
05...	0851	QC - Surface water, concurrent replicate	--	--	--	--	--	--	--
May 13...	1130	Surface water, regular	53	18	.187	.149	758	10.1	93
Aug 18...	1120	Surface water, regular	6.8	12	.118	.095	755	8.9	100

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf μS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO ₃ (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO ₂ (00955)
Nov 08...	6.5	261	6.0	6.3	42	9.49	4.42	3.56	25.8	10	53.8	.14	10.9
Mar 05...	5.7	237	10.0	10.7	42	10.2	3.94	3.01	23.4	E4	45.6	.14	9.5
05...	--	--	--	--	40	9.60	3.80	2.90	23.0	2	44.0	.18	--
05...	--	--	--	--	40	9.80	3.80	3.00	23.0	2	45.0	.19	--
May 13...	6.2	203	19.0	11.5	34	7.84	3.41	2.70	18.7	10	36.7	.13	8.5
Aug 18...	6.8	267	29.0	21.0	41	9.80	4.06	3.70	27.9	13	54.7	.20	9.1

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti- tuents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non- filter- able, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Total nitro- gen, water, fltrd, mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)
Nov 08...	18.0	E136	156	7	.22	--	.101	.92	.05	1.1	1.2	E.007	<.008
Mar 05...	24.2	E127	142	64	.34	--	E.082	.92	.42	1.3	1.7	.014	.065
05...	26.0	115	150	60	E.32	E.85	.070	.920	--	E1.2	E1.8	<.050	<.050
05...	26.0	116	140	64	E.17	E.84	.069	.890	--	E1.1	E1.7	<.050	<.050
May 13...	17.6	E105	118	16	.38	--	.121	.74	.17	1.1	1.3	E.005	.016
Aug 18...	17.9	E138	157	3	.28	--	.042	.55	.05	.83	.88	E.006	.008

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 4

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Phos- phorus, water, unfltrd mg/L as P (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Boron, water, fltrd, µg/L (01020)
Nov 08...	.042	.5	<.04	.5	1.8	22
Mar 05...	.44	4.4	<.04	4.4	2.5	18
05...	.440	--	--	--	3.6	14
05...	.440	--	--	--	3.9	14
May 13...	.130	1.6	<.04	1.6	3.8	19
Aug 18...	.068	.5	<.04	.5	2.8	25